

Cloudpath Enrollment System

Setting Up Sponsored Guest Access Within Cloudpath

Software Release 5.0

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Summary: This document describes the Cloudpath sponsorship process, how to configure sponsored guest access, how to set up sponsors, and how to customize the sponsorship portal. This document also provides information for sponsors; including how to log in to the sponsorship portal, how to create and manage vouchers, how to manage user devices with vouchers, and sponsor management. **Document Type:** Configuration

Audience: Network Administrator



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Software Release 5.0 November 2016

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Setting Up Sponsored Guest Access Within Cloudpath

Overview

Sponsored guest access allows authorized employees to grant network access to third-parties. It is most commonly used to provide secure wireless network access to corporate visitors and partners, and is typically time-restricted. By distributing authorization to employees, third-parties are able to quickly gain access without IT involvement and with appropriate traceability.

Example Use Case - Generated Voucher Lists

During the setup of the Cloudpath Enrollment System (ES), the network administrator specifies that visitors may gain network access if they are sponsored. The network administrator specifies that anyone belonging to the *Wireless Sponsors* group within Active Directory is allowed to sponsor a guest. Along with this, the network administrator specifies that access is valid for three days.

Sponsorship Portal				
	Network Sponsorship Login			
	Username:			
	Login			

FIGURE 1. Cloudpath Sponsorship Login Page

Prior to the guest's arrival, the sponsor accesses the sponsorship portal. After authenticating with the Active Directory server, the sponsor can specify details about the guest user, including name, email address, and the reason for sponsorship. After doing so, a unique voucher is generated for the guest user.

A voucher is a one-time password (OTP) and is useful for controlling access to an enrollment process separate from, or in addition to, user credentials. The system may automatically email the guest user or the sponsor can communicate the voucher manually.

Upon arrival, the guest user accesses the onboarding wireless network. The guest user is redirected to the Cloudpath system. The guest user completes the workflow specified by the network administrator, including specifying the voucher. Once authorized, the guest user is issued a certificate and moved to the secure wireless network.

Example Use Case - Request Network Access

While the *Generated Vouchers* use case requires the sponsor to pre-sponsor a user by generating a voucher ahead of time, the *Request Network Access* use case allows the user to enter their information on a webpage during the enrollment process, and request access. The user is held in a pending state until the sponsor accepts or rejects the request. The request may go to a static user (like a receptionist), to a sponsor selected from a list by the user, or to a sponsor entered by the user.

In this use case, Cloudpath is set up with a Request Access workflow plug-in, which allows the ondemand access to occur. This enrollment step allows the user to request access to the network as part of the enrollment process. It is not necessary to create a voucher list ahead of time.

The access request was submitted with the following information: Status: Awaiting approval.	
Status: Austring approval	
Status. Awaring approval.	
Name: Test User	
Company: Cloudpath	
Email:	
🗄 User's Reason: Test	
Access Days (Approval Only): 30	
Reason	
Reason For Admins: User Accepted.	
Reason For User: Welcome to the Secure Network!	

FIGURE 2. Review Access Request

Upon arrival, the guest user accesses the onboarding wireless network. The guest user is redirected to the Cloudpath system. The guest user completes the workflow specified by the network administrator, and when the guest encounters the request access step, they fill in the required information and this information is sent to an approved sponsor. The sponsor can approve the access request, which allows the user to continue with the enrollment process. Once authorized, the guest user is issued a certificate and moved to the secure wireless network.

Sponsorship Process

Sponsor Experience - Generated Voucher Lists

An administrator gives an employee permission to sponsor guest users by placing them in a Sponsor group in the corporate authentication server (AD or LDAP). When a visitor arrives, the employee sponsor checks the visitor in. To provide a quest user with network access, the sponsor must log in to the Sponsorship Portal to create a voucher for the guest user.

Sponsors can access the Sponsorship Login Portal from:

- ES Admin UI Deployment Locations page (Figure 3), or Sponsor Portal button.
- ES Admin UI Voucher Lists page (Figure 23).
- The Sponsorship URL https://<SponsorshipLoginIPaddress>/portal/sponsor/.

FIGURE 3. Link to Sponsorship Login Page - Deployment Locations Page

Dej	Deployment Locations							
n	A deployment location represents a URL to where a workflow is deployed. Multiple locations may be used for a variety of reasons. For example, a production configuration may be deployed to /production, and a test configuration may be deployed to /test.							
	Location 1:	Product	ion					1 X S
	Enrollment Portal: https://anna44.cloudpath.net/ or https://anna44.cloudpath.net/ or https://anna44.cloudpath.net/ or https://anna44.cloudpath.net/							
	WLAN Redirect URL: https://anna44.cloudpath.net/enroll/AnnaTest/Production/redirect Fi Sponsorship Portal: /portal/sponsor/AnnaTest/							
	Go To: User Experience Sponsor Portal Get QR Code Explain Chrome Setup							
		Snapshots:	_	Name	Notes	Configuration	Version	Timestamp
		Create New	Q X 🕲	Snapshot 4		Demo Data	5.0.191	20150513 1043 MDT

After sponsor credentials are checked against the corporate authentication server, the sponsorship portal Welcome page appears.



9	Sponsorship Portal			
	Create Voucher			
	Welcome to the XpressConnect Enrollment System. To invite users to join the wireless network, click Create Voucher above.			

The sponsor clicks the Create Voucher button to create a voucher for the guest user.

FIGURE 5. Create Voucher for Guest User

Create Voucher		Save
Name: Company: Email: Email Voucher To User? Phone Number: SMS Voucher To User? Redeem Voucher By: Reason:	United State 🔍	

Note >>

The entry fields displayed on the *Create Voucher* page are configured when you create the voucher list. See Adding a Voucher Prompt to the Enrollment Workflow.

The sponsorship portal can be used to create vouchers, view voucher usage, and with the correct permissions, manage vouchers and sponsors. When finished, the sponsor must log out of the sponsorship portal.

Sponsor Experience - Request Network Access

A sponsor receives an email notification that indicates they are approved for granting network access to guest users.

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FIGURE 6. Email to sponsor



The sponsor receives and email from the guest user requesting access. This messaging is configurable.

FIGURE 7. Email from System

 Cloudpath Support <server@cloudpath.n to me <</server@cloudpath.n 	2:25 PM (1 minute ago) 📩 🔺 👻	
Test	Wi-Fi access has been requested by Jane Smith. Name: Jane Smith Company: Test Company Reason: Request Secure Wi-Fi Access	
	Review	

The sponsor clicks the Review button to review the request and respond to the user.

Review Access Request	Reject Approve
	The access request was submitted with the following information:
Status:	Awaiting approval.
Name:	Jane Smith
Company:	Test Company
Email:	
🗄 User's Reason:	Request Secure Wi-Fi Access
Access Days (Approval Only):	30
Reason	
Reason For Admins:	
🖲 Reason For User:	You have been granted access to our Secure Network.

FIGURE 8. Sponsor Approves Guest Access

Sponsor receives confirmation that access has been accepted.

FIGURE 9. Access Accepted Confirmation

I	Test Sponsorship Portal					
	Request Result					
	Access request has been accepted.					

Guest User Experience

Guest User Experience - Generated Voucher Lists

The guest user receives the voucher from the sponsor (by email, SMS, or manual delivery), accesses the onboarding wireless network, and is redirected to the Cloudpath system. As part of the enrollment process, the visitor is prompted for the voucher code.

FIGURE 10. Voucher Prompt for Guest User

<u>Start Over</u>	Powered by Ruckus Networks
ň	Simply Better Wireless.
Enter the voucher th	at you received.
Voucher:	
< Back	Continue >

The guest user enters the voucher code provided by the sponsor and continues with the enrollment process to gain access to the secure network.

Guest User Experience - Request Network Access

The guest user comes within range of the onboarding SSID. If you have a captive portal configured, they are redirected to the Cloudpath system to enroll their device for the secure SSID. If no captive portal is configured, an enrollment URL is provided to them.

As part of the enrollment process, the guest is prompted for to request access to the secure network. The guest must wait for approval before they can continue.

<u>Start Over</u>	Powered by Cloudpath Networks
Y	
To	ur Logo Here
Request Networ	k Access
	ion below to request network access. Once approved, you
will be granted network	
Name	
Company:	
Reason:	
-	
< Back	Send
Assistance ID #9D81	anna244.cloudpath.net (5.0.233)

FIGURE 11.	Enrollment Process	Request	Access	Form
	Enternetteressee	1.09000		

The user enters the required information. The list of required fields is configurable.

Start Over	Powered by Cloudpath Networks
Your Lo	go Here
Request Network Access	5
The sponsor has been not the sponsor has accepted	otified. This page will automatically refresh once d the request.
< Back	
Assistance ID #1B41	bvtes.cloudpath.net (5.0.233)

FIGURE 12. Pending Access Request

If the access is approved, the user continues with the enrollment process. The next screen the users sees depends on how the network

Prerequisites

Authentication Server Setup

To configure the sponsored access feature, the network administrator must set up a sponsor group in the Corporate AD or LDAP server for employees that can be authorized as sponsors. For example, create a group named *Manager* or *Wireless Sponsors*.

This group name is used in Cloudpath when configuring which users are able to log into the sponsorship portal and sponsor guest users.

Configuring Cloudpath

This section describes how to configure the Active Directory or LDAP server for sponsorship, add a voucher or request for access prompt to the enrollment workflow, and how to add vouchers and sponsors to the voucher list.

Note >>

Administrators configure sponsors, the sponsorship portal, vouchers, and voucher lists from the Cloudpath Administrator user interface. Sponsors invite guest users and create vouchers from the sponsorship portal. See "Sponsorship Portal" on page 24 for more information.

Authentication Server Configuration

You must set up your Active Directory or LDAP server to support sponsorship.

How to Configure the Authentication Server for Sponsorship

- 1. From the ES Admin UI, go to Administration > Advanced > Authentication Servers.
- 2. On the Authentication Servers page, edit the AD or LDAP server you will be using to authenticate sponsors and guest users.

Add Au	uthentication Server	<	Back Next >
۲	Connect to Active Directory		
	Select this option to enable end-us	ers to authenticate via Active Directory.	
	🗄 Default AD Domain:	test.sample.local	
	+ AD Host:	Idaps://192.168.4.2	*
	+ AD DN:	dc=test,dc=sample,dc=local	*
	🗄 AD Username Attribute:	SAM Account Name	
	Verify Account Status On Eac	h Authentication	
	• Perform Status Check:		
	Additional Logins		
	• Use For Admin Logins:		
	🗄 Use For Sponsor Logins:		
	Test Authentication		
	Run Authentication Test?		
0	Connect to LDAP		
	Select this option to enable end-us	ers to authenticate via LDAP (or LDAPs).	
	Connect to RADIUS		
	Select this option to enable end-us	ers to authenticate via RADIUS using PAP.	

FIGURE 13. Configure AD Server for Sponsorship Logins

3. Select the *User For Sponsor Logins* box, to allow sponsors to log into the sponsorship portal using credentials from this authentication server.

Adding a Voucher Prompt to the Enrollment Workflow

This section describes how to add a step in the enrollment workflow to prompt a guest user for a voucher or one-time password. Use this configuration if you plan to use generated voucher lists.

How to Add a Voucher Prompt for Guest Users in the Workflow

1. From the ES Admin UI, go to *Configuration > Enrollment* and create an enrollment workflow for guest users.

2. Add an enrollment step that prompts guest users to Authenticate via a voucher.

FIGURE 14. Create Voucher Enrollment Step

•	Display an Acceptable Use Policy (AUP).
	Displays a message to the user and requires that they signal their acceptance. This is normally used for an acceptable use policy (AUP) or end-user license agreement (EULA).
0	Authenticate to a local server.
	Prompts the user to authenticate to an Active Directory server, and LDAP server, or a RADIUS server.
0	Ask the user about concurrent certificates.
	Prompts the user with information about previously issued certificates that are still valid. This may suggest that old certificate be removed or may limit the maximum number of concurrent certificates.
•	Split users into different branches.
	Creates a branch or fork in the enrollment process. This can occur (1) visually by having the user make a selection or (2) it
	can occur automatically based on criteria associated with each option. For example, a user that selects "Guest" may be sent
	through a different process than a user that selects to enroll as an "Employee". Likewise, an Android device may be present a different enrollment sequence than a Windows device.
0	Authenticate to a third-party.
	Prompts the user to authenticate via a variety of third-party sources. This includes internal OAuth servers as well as public
	OAuth servers, such as Facebook, LinkedIn, and Google.
۲	Authenticate using a voucher from a sponsor.
	Prompts the user to enter a voucher previously received from a sponsor. The sponsor generates the voucher via the Sponsor
	Portal, typically before the user arrives onsite.
0	Perform out-of-band verification
	Sends the user a code via email or SMS to validate their identity.
0	Sends the user a code via email or SMS to validate their identity. Register device for MAC-based authentication.
•	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authenticaton by RADIUS. This is used for two primary use cases: (1) to
0	Register device for MAC-based authentication. Registers the NAC address of the device for MAC authenticaton by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID via the WLAN captive portal or (2) to register a device, such as a gaming device
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authenticaton by RADIUS. This is used for two primary use cases: (1) to
-	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID via the WLAN captive portal or (2) to register a device, such as a gaming device for a PSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a
-	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authenticaton by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SISD via the VLNA captive portal or (2) to register a device, such as a gaming device for a PSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time.
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID with two LNA captive portal or (2) to register a device, such as a gaming device for a PSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time. Display a message.
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authenticaton by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID via the WLAN captive portal or (2) to register a device, such as a gaming device for a PSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue.
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authenticaton by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID via the WLAN captive portal or (2) to register a device, such as a gaming device for a PSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue. Redirect the user.
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authentication by AADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID with the UAIN captive portal or (2) to register a device, such as a gaming device for a PSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue. Redirect the user. Redirects the user to a specified external URL. This may be used to authenticate the user to the captive portal of the
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SISD via the UAIN captive portal or (2) to register a device, such as a gaming device for a PSK-based SISD. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue. Redirects the user to a specified external URL. This may be used to authenticate the user to the captive portal of the onbarding SISD.
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SISD via the VLAN captive portal or (2) to register a device, such as a gaming device for a SSK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue. Redirects the user. Redirects the user to a specified external URL. This may be used to authenticate the user to the captive portal of the onboarding SSID. Prompt the user for information. Prompt the user for information.
0	Register device for MAC-based authentication. Registers the MAC address of the device of the CVMAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSD via the VAIA cathress will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue. Redirects the user. Redirects the user to a specified external URL. This may be used to authenticate the user to the captive portal of the orboarding SSD. Displays a prompt screen with customizable data entry fields. Authenticate via a shared passphrase. Prompts the user for a passphrase and verifies it is correct. A shared passphrase is useful for controlling access to an
0	Register device for MAC-based authentication. Registers the MAC address of the device for MAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSID via the WLAN captive portal or (2) to register a device, such as a gaming device for a SK-based SSID. In both cases, the MAC address will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue. Redirect the user. Redirect the user to a specified external URL. This may be used to authenticate the user to the captive portal of the onboarding SSID. Prompt the user for information. Displays a prompt screen with customizable data entry fields. Authenticate via a shared passphrase. Authenticate via a shared passphrase.
0	Register device for MAC-based authentication. Registers the MAC address of the device of the CVMAC authentication by RADIUS. This is used for two primary use cases: (1) to authenticate the device on the current SSD via the WAC address will be captured and the device will be permitted access for a configurable period of time. Display a message. Displays a message to the user along with a single button to continue. Redirects the user. Redirects the user to a specified external URL. This may be used to authenticate the user to the captive portal of the orboarding SSD. Displays a prompt the user for information. Displays a prompt screen with customizable data entry fields. Authenticate via a shared passphrase. Prompts the user for a passphrase and verifies it is correct. A shared passphrase is useful for controlling access to an authenticate the user for orbiting access to an authenticate the screen via the controlling access to an authenticate the user for a passphrase and verifies it is correct. A shared passphrase is useful for controlling access to an authenticate the user for a passphrase and verifies it is correct.

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3. Create a new voucher list for guest users.

FIGURE 15. Create Voucher List

Create Voucher List	[Cancel < Back Next >
Reference Information		
Reference Information		
Name:	Test Voucher List	*
Description:		
		/_
API ID:	OtpList-5804BFC1-0AFA-4EC0-B9A7-87DB9BBAE01A	
Format		
Format		
Length:	4	
Characters:	alphabetic (Lowercase)	
Default Validity Length:	7	
+ Default Days of Access:	0	
Maximum Days of Access:		
	7	
Require Username Match:	5	
Notification		
Email Subject:	Network Access	
Email Body:		
+ Email Body:	The following voucher code is required to access the network Voucher Code: \$(VOUCHER)	u
	National American	
SMS Subject:	Network Access	
SMS Body:	The following voucher code is required to access the network	с. — — — — — — — — — — — — — — — — — — —
	Voucher Code: \$(VOUCHER)	
		//
Sponsorship		
Allow by LDAP Group:		
Allow by LDAP Username:		
Allow by LDAP Username DN:		
Maximum Certificates:	0	
Default Permissions:	Add/Edit/Delete Sponsors In Group	
	Manage Devices Enrolled By Sponsor	
	Manage Devices Enrolled By All Allow Bulk Creation	
New Sponsor Email Subject:	Sponsorship Access	
New Sponsor Email Template:	You have been setup as a sponsor. To login as a sponsor, us below. URL: \$(URL) Username: \$(EMAIL)	e the information
	\$(PASSWORD) >br/> >On your first login, you will be p your password.	rompted to change
		//
Fields Displayed To Sponsor		
Name Field:	Show and require entry.	
Company Field:	Show.	
Email Field:	Show.	
• SMS Field:	Show.	
Reason Field:	Show.	
Redeem By Field:	Show.	
Days of Access Field:	Do not show.	
	are not allow.	
Initial vouchers		
Initial Voucher #1:		
+ Initial Voucher #2:		
• Initial Voucher #3:		
Initial Voucher #4:		
Initial Voucher #5:		

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- 4. In the Sponsorship section, enter the appropriate information in the following fields:
 - Format In addition to defining the voucher format, determine if you want to enable *Require* Username Match.

Note >>

Require Username Match means that the user must authenticate with a username that matches the name specified in the voucher provided by the sponsor. This allows the voucher to be locked to a particular user.

- LDAP Group Regex Defines with groups within LDAP are allowed to be sponsors. For example, if you enter *Wireless Sponsors*, this means that anyone in the *Wireless Sponsors* AD group can sponsor a guest user. *LDAP Username* defines which usernames within LDAP are allowed to be sponsors, *LDAP Username DN* defines with username DNs are allowed to be sponsors.
- Maximum Certificates Maximum number of vouchers that a sponsor is allowed to create and allocate for a particular voucher list.
- **Default Permissions** The permissions to be used for sponsors authenticated using the *Sponsorship AD Group Regex*.

-Add/Edit/Delete Sponsors In Group - If checked, the sponsor can add, edit, and delete other sponsors within the group.

-Manage Devices Enrolled By Sponsor - If checked, the sponsor can review and revoke devices enrolled via vouchers issued by that sponsor.

-Manage Devices Enrolled By All - If checked, the sponsor can review and revoke devices enrolled via vouchers issued by any sponsor (within the Voucher List).

- New Sponsor Email Subject When a new sponsor is added, an email is sent to the sponsor with this subject.
- New Sponsor Email Template When a new sponsor is added, an email is sent to the sponsor with this message.
- 5. In the *Fields Displayed to Sponsor* section, select *Do not show*, *Show*, or *Show and require entry* to specify the information to be shown when a sponsor creates a voucher list for guest access.

If a field is listed as Do Not Show, that field does not appear in the voucher list.

- 6. If needed, create one or more Initial vouchers.
- 7. Create a webpage that will prompt the user to enter their voucher and Save. The voucher prompt is saved in the workflow.

Note >>

Workflow Test	t View: Workflow HTML Template Properties	×
messages to the	nes the sequence a user must go through to register and connect to the network. This includes the display of e user, the acceptance of use policies, and authentication of the user and/or device. v represent a step within the process. To add additional steps, click the insert arrow on the left side of row.	
Step 1:	Require the user to accept the AUP Welcome Message and AUP	K Q.
Step 2:	Split users by: X_I Visitors Employees Partners	≣×Q
Step 3:	Authenticate the user via LinkedIn, Facebook, or Gmail	KQ
Step 4:	Prompt the user for a voucher from Sponsored Guest Access	KQ
Result:	End of process. No network or certificate assigned.	

FIGURE 16. Cloudpath Workflow

Best Practice >>

Sponsored access can be combined with additional options, such as authentication via Facebook, LinkedIn, or Google. When combined, the social media provides the authentication while the voucher provides the authorization. This method provides additional identity information and reduces the risk of the voucher being intercepted or misused.

Adding a Request for Access Prompt

This section describes how to create a workflow plug-in that allows guests to request access via sponsorship upon arrival. Use this configuration if you want users to request immediate access from sponsors.

While the voucher list workflow plug-in requires the sponsor to pre-sponsor the guest, the request for access workflow plug-in allows the guest to enter their information on a webpage and then request access. The guest is held in a pending state until the sponsor accepts or rejects the request. The request may go to a static user (like a receptionist), to a sponsor selected from a list by the guest, or to a sponsor that is entered by the guest upon arrival.

How to Add a Request for Access Prompt to the Workflow

1. From the ES Admin UI, go to *Configuration > Enrollment* and create an enrollment workflow for guest users.

2. Add an enrollment step that prompts guest users to Request Access From a Sponsor.

FIGURE 17.	Create Acce	ss Request
------------	-------------	------------

Create Access Request	Cancel < Back Save
Reference Information	
	*
+ Name:	Test Access Request *
+ Description:	
Sponsors	
Sponsors:	Static T
Default Sponsor Email:	[ex. receptionist@company.com]
Default Days of Access:	30
Sponsor Email Template	
Sponsor Email Subject:	WI-FI Access Requested - \$(NAME)
Sponsor Email Message:	-shtmi>-sbody>-sdiv.style="width: 320p;: border: 1pv:sdid #COCCC: mergin: auto; pading: 10p;">-sdiv.style="madding-body: equested by \$(WAME). style="madding-body: sdiv>\$(REVIEW_BUTTON) body>
Fields Visible To User	
• Name Field:	Show and require entry.
Company Field:	Show.
• Email Field:	Do not show.
Phone Field:	Do not show.
Reason Field:	Show.
Fields Visible To Sponsor	
Sponsor Reason Field:	Show.
Days of Access Field:	Show.
Maximum Days of Access:	90
User Webpage Information:	
+ Page Source:	Standard Template 🔻
+ Title:	Request Network Access
🖲 Initial Message:	Complete the information below to request network access. Once approved, you will be granted network access.
	/
Waiting Message:	The sponsor has been notified. This page will automatically refresh once the sponsor has accepted the request.
Submit Button Label:	Send
User Error Messages	
Unknown Sponsor Error:	The sponsor specified is not valid.
Request Rejected Error:	The request has been rejected. Contact the sponsor for assistance.
Request Expired Error:	The request has expired.

- 3. For *Sponsors*, enter the email address for a dedicated contact, create a drop-down list of sponsors, or allow the guest to enter the email address of a sponsor.
- 4. The Sponsor Email Template is the information sent to the sponsor when a guest is requesting access. Use the default sponsor email template or create a custom email subject and message.
- 5. Specify the fields to display to the guest user.
- 6. Specify the fields to display to the sponsor receiving the access request.
- 7. The User Webpage Information is the prompt that displays to the guest during the enrollment process. Use the default guest prompt, enter your own messaging, or upload a custom HTML file.
- 8. The User Error Messages display to the guest user if there is an issue with the access request.
- 9. Click Save.

FIGURE 18. Request for Access Workflow

Workflow	Guest Workflow	View:	Workflow	Look & Feel	Properties				×
	defines the sequence to the user, the accep					he network. This includes and/or device.	the display of		
-						e insert arrow on the left	side of row.		
A St	P 1: Require the	e user to accep	t the AUP	Welcome Me	essage and	AUP		IX Q	
St	ep 2: All matches	sin: X / G	uests Em	ployees +				∥≣×Q,	
St	ep 3: Request ac	cess from spor	isor using (Guest Acces	5.			_/ X Q	
R	sult: Move user	to Guest Net	vork and a	assign certifica	ate using Gu	est Policy Template.		J	

The workflow now includes the step for requesting guest access.

Adding Vouchers to a Voucher List

This section describes how to populate a voucher list. You can add a single voucher or upload multiple vouchers from a CSV file.

Voucher Lists

- 1. From the ES Admin UI, go to Sponsorship > Vouchers to view the voucher lists. (Alternately, you access the Voucher List page by double-clicking the Voucher List link in the enrollment workflow.)
- 2. Expand the voucher list.

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cher lists	supporting s	ponsorship, :	sponsors may	login at <u>/po</u>	rtal/sponsor/.			
List 1:	Test Vouc	her					.I	×
Vie								
	Vouchers:							
	Add Voucher	+	Voucher	Status	End-User Name	Company	Sponsor	Expires
		There were no r	esuits round.					
Individua	al Sponsors:		Marca				Tura	
		+ . (X	Anna Eichel		anna@cloudpath.net		ONBOARD	
				÷ +	Results 1 - 1 of 1. 👘	15 💽 🕅 💥		
List 2:	Partner In	iternal Acces	s Vouchers	\$ \$	Results 1 - 1 of 1. 📦	15 ▼ ¥ ※	J.	×
	List 1: Vie Spon Individua	List 1: Test Vouc View Options: Vouchers: Add Voucher	List 1: Test Voucher View Options: Show unused Show recently Vouchers: Add Voucher There were no r Sponsor Groups: [None] Individual Sponsors:	List 1: Test Voucher View Options: Show unused vouchers. Sho Show recently consumed vouchers Vouchers: Add Voucher There were no results found. Sponsor Groups: [None] Individual Sponsors:	List 1: Test Voucher View Options: Show unused vouchers. Show expired vouc Show recently consumed vouchers. Show expired vouc Nouchers: Add Voucher There were no results found. Sponsor Groups: [None] Individual Sponsors:	View Options: Show unused vouchers. Show expired vouchers. Show recently consumed vouchers. Show all consumed vouchers. Vouchers: Add Voucher There were no results found. Sponsor Groups: [None] Individual Sponsors:	List 1: Test Voucher View Options: Show unused vouchers. Show expired vouchers. Show recently consumed vouchers. Show all consumed vouchers. Vouchers: Add Voucher There were no results found. Sponsor Groups: [None] Individual Sponsors:	List 1: Test Voucher View Options: Show unused vouchers. Show expired vouchers. Show all consumed vouchers. Vouchers: Add Voucher There were no results found. Sponsor Groups: [None] Individual Sponsors:

FIGURE 19. Voucher List

3. Click *Add Vouchers* to create a single voucher or upload a list of vouchers. The *Create Vouchers* page opens.

FIGURE 20. Create Vouchers

Create	Vouchers		Cancel Next >
0	Create a single voucher.		
۲		ollowing sequence: vouchers, name, description, company, country code. If voucher is left blank, a voucher will be ge	

How to Add a Single Voucher to a Voucher List

1. On the Create Vouchers page, select Create a single voucher.

FIGURE 21.	ES Admin UI -	Create Single	Voucher
------------	---------------	---------------	---------

Modify Voucher	Cancel < Back Save
 Voucher: Name: Company: Email: Email Voucher To User? Phone Number: 	zyop
SMS Voucher To User? Reason: Redeem Voucher By:	20130729

- On the Modify Voucher page, enter the guest user information in the fields, as described below, and Save. Only the Voucher field is required.
 - Voucher This field is pre-populated, but can be changed.
 - Name Guest user name.

Note >>

If *Require Username Match* has been specified in the voucher list, the guest must authenticate with a username that matches the name specified in the voucher provided by the sponsor. This allows the voucher to be locked to a particular user.

- Company Guest user company.
- Email Guest user email address.
- Email Voucher to User? Checked by default. If checked and email is entered, voucher is sent to guest user by email.
- Phone Number Select country and enter guest user phone number.
- SMS Voucher to User? Checked by default. If this is checked and Phone Number is entered, voucher is sent to guest user by SMS.
- Reason The reason the guest user is provided access.
- Redeem Voucher By The date after which the voucher may longer be redeemed.

Note >>

Email and SMS notifications are stored on the *Notifications* tab on the Cloudpath Admin UI Dashboard.

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How to Add Multiple Vouchers to a Voucher List

If you are using a comma-separated value (CSV) file to upload multiple vouchers, the information must be formatted according to the instructions on the *Create Vouchers* page. A template file is available for download.

- 1. On the Create Vouchers page, select Upload a CSV file containing a list of vouchers.
- 2. Click Choose File to navigate to the CSV file to upload and click Next.

FIGURE 22. Review Vouchers to Import

	ers By TXT M d Vouchers By				
Voucher	Status	End-User Name	Company	Sponsor	Expires
401	Available			anna@cloudpath.net	20131230
402	Available			anna@cloudpath.net	20131230
403	Available			anna@cloudpath.net	20131230
	Available			anna@cloudpath.net	20131230
404	Available				

- 3. Verify the vouchers to import and specify if voucher should be sent to user by email or SMS, and *Save*.
 - Send vouchers by TXT messages If checked, the voucher is sent to the user by TXT, if a phone number is specified in the CSV file.
 - Send vouchers by Email If checked, the voucher is sent to the user by email, if an email address is specified in the CSV file.

The *Voucher Lists* page shows which vouchers have been used, the expiration dates, and any guest user details that were entered when the sponsor created the voucher, or contained in the CSV file.

Note >>

The voucher field must be listed as *Show* in the voucher list to see it on the voucher table. For example, if *Days of Access* is set to *Do Not Show* on the voucher list, and your spreadsheet includes *Days of Access*, they do not appear in the voucher table. You must change the setting to *Show* in the voucher list. See Adding a Voucher Prompt to the Enrollment Workflow for more information.

Adding Sponsors to a Voucher List

Administrators can add sponsors to a voucher list. Sponsors can create vouchers and invite guest users to join the secure network.

Cloudpath supports Onboard and External sponsors. Onboard sponsors are created locally on the ES Admin UI. External sponsors can log into the Sponsorship Portal if they match a username or group name specified in the Authentication server.

How to Add Onboard Sponsors

An onboard sponsor is created locally on the ES Voucher list.

 From the ES Admin UI, go to Sponsorship > Vouchers to view the voucher list to be used for sponsors. (Alternately, you access the Voucher List page by double-clicking the voucher list link in the enrollment workflow.)

FIGURE 23. Voucher List - Add Sponsor

For youcher	-	onsorship, spo	insors may l	ogin at /por	tal/sponsor/AnnaTest	/.		
						-		6
	View Options:				ers. consumed vouchers.			
	Vouchers:							
		+ There were no re:	Voucher sults found.	Status	End-User Name	Company	Sponsor	Expires
	Sponsor Groups: B ividual Sponsors: N		sors currently	y exist. Add	1 Sponsor			

2. In the Sponsor Group section, click Add Sponsors. The Sponsor Email pop-up appears.

FIGURE 24. Sponsor Email

Sponsor Email X	
Enter the email address of the sponsor below. This will be used as their username.	
Email	
]
	_
Cancel Continue	//,

3. Enter the email address of the sponsor for this voucher list and click *Continue*. The email address becomes their *Name*.

Modify Sponsor		Cancel Save
 Name: Description: 	Test User	
🖲 Enabled: 🖲 API ID:	Sponsor-A4174154-6857-42AA-B8B8-72C86EABCE6F	
Login Information		
€ Email: € Password: € Send Email:	sponsor@company.net	
Permissions		
Permissions	 Add/Edit/Delete Sponsors In Group Manage Devices Enrolled By Sponsor Manage Devices Enrolled By All Allow Bulk Creation 	

- 4. On the Modify Sponsor page, enter the sponsor Name, Description, and Enable the sponsor.
- 5. In the *Login Information* section, enter the sponsor's *Email* address and *Password*. If you check the *Send Email* box, this information is emailed to the sponsor.

Note >>

The sponsor is prompted to change their password during the first login.

- 6. In the Permissions section, check the box for the appropriate sponsor permissions.
 - Add/Edit/Delete Sponsors In Group If checked, the sponsor can add, edit, and delete other sponsors within the group.
 - Manage Devices Enrolled By Sponsor If checked, the sponsor can review and revoke devices enrolled via vouchers issued by that sponsor.
 - Manage Devices Enrolled By All If checked, the sponsor can review and revoke devices enrolled via vouchers issued by any sponsor (within the Voucher List).
 - Allow Bulk Creation If checked, the sponsor can create vouchers in bulk by importing a spreadsheet of vouchers. A default template is provided.
- 7. Save the sponsor information. The sponsor information is displayed in the lower part of the voucher list.

Voucher Lists For voucher lists supporting sponsorship, sponsors may login at /portal/sponsor/AnnaTest/. 1 🕲 List 1: Sponsor Voucher List View Options: Show unused youchers. Show expired youchers Show recently consumed vouchers. Show all consumed vouchers. Vouchers: Add Voucher JX eygf Available 20130730 JX ktkz Available 20130730 20130730 1X khty Available anna@cloudpath.net 20130729 0× Available wizp ш 0× Available kl anna@cloudpath.net 20130729 yndp 🏟 🌐 Results 1 - 5 of 5. 🔿 🎒 🛛 15 😱 🛛 💥 Sponsor Groups: BYOD APP.* Individual Sponsors: Add Sponsor 0× anna@cloudnath.net appa@cloudpath.pet ONBOARD ONBOARD 1X test@company.net test@company.net 🏟 🖷 Results 1 - 2 of 2. 🐵 📾 🛛 15 😱 🛛 💥

FIGURE 26. ES Admin UI - Voucher Lists

External Sponsors

An external sponsor uses AD or LDAP credentials to log into the Sponsorship Portal. An external sponsor can create voucher, invite users to join the secure network, and if the voucher list permissions allow, they can manage other sponsors and enrolled devices. To set up sponsor permissions for a voucher list, see "Adding Sponsors to a Voucher List" on page 21.

If you want to allow sponsors to log in to the Sponsorship Portal using AD or LDAP credentials, the authentication server must be configured with the specified username or group name filter. To configure group filters for an authentication server, see "Authentication Server Configuration" on page 10.

Sponsorship Portal

From the sponsorship portal, a sponsor can invite guest users to join the network by creating one or multiple vouchers, view outstanding, consumed, expired, and revoked vouchers, and manage devices, and sponsor accounts in your AD or LDAP group.

Use the Sponsorship Portal if guests access is managed using voucher lists.

Note >>

Only sponsors with manage permissions can manage sponsor accounts in the AD or LDAP group. Sponsor permissions are set per voucher list. See "Adding Sponsors to a Voucher List" on page 21.

How to Customize Sponsorship Portal

You can customize the labeling, images, and colors for the sponsorship portal.

- 1. From the ES Admin UI, go to *Sponsorship > Look & Feel*. The sponsorship portal *System Setup* page displays the titles and colors for the sponsorship portal.
- 2. Click Edit to customize the sponsorship portal.

Sponsorship Portal		Cancel Save
Page Source:	Standard Template	
• Title:	XpressConnect Enrollment System]
Subtitle:	Sponsorship Portal]
🖲 Welcome Message:	Welcome to the XpressConnect Enrollment System. To invite users to join the wireless network, click Create Voucher above.	
Look & Feel		
🗄 Login Title:	Network Sponsorship Login]
💿 Leftbar Color:	333A4A Reset Default	
💿 Topbar Color:	666666 Reset Default	
💿 Lowerbar Color:	COCOCO Reset Default	
🖲 Login Color:	C0C0C0 Reset Default	
Logo File		
The logo file to use in the upper-le	eft corner. The image size should be 180 x 84 pixels.	
🖃 Logo File:	Choose File No file chosen	

FIGURE 27. Customize Sponsorship Portal

- 3. Modify titles and colors as needed.
- 4. To import a customized logo file to display in the upper-left corner of the sponsorship portal, the image size should be 180 x 84 pixels.
- 5. Save the customizations.

How to Log in to the Sponsorship Portal

- 1. Sponsors can access the sponsorship portal by entering the sponsorship URL https:// <SponsorshipLoginIPaddress>/portal/sponsor/.
- 2. The portal login page opens.

FIGURE 28. Sponsorship Portal Login

Sponsorship P	ortal	
	Network Sponsorship Login	
	Username:	
	Password:	
	Login	

- 3. Sponsors enter the *Username* and *Password* that was sent when the voucher list was created. See "Adding Sponsors to a Voucher List" on page 21.
- 4. The first time a sponsor logs in, the password must be changed.

FIGURE 29. Sponsorship Portal - Change Password

onsorship Portal	
Change Password	Next >
Enter a new password below.	
New Password: Confirm Password:	

5. After the password updates, the Sponsorship Portal opens. The left menu includes tabs for *Sponsorship* operations and *Administration* operations.

FIGURE 30. Sponsorship Portal Left Menu

	XpressConnect Enrollment System
Cloudpath	Sponsorship Portal
▼ Sponsorship	
Invite User(s) Create a new voucher to enable a user to enroll their device. Review Invitations Outstanding Invitations Consumed Invitations Revoked Invitations	Create Voucher Welcome to the XpressConnect Enrollment System. To invite users to join the wireless network, click Create Voucher above.
Administration	

Sponsorship tab

-Invite User - Allows sponsors to create a new voucher that will enable a guest user to enroll their device.

-**Review Invitations** - Allows sponsors to view outstanding, consumed, expired, and revoked invitations.

Administration tab

-Sponsors - If permissions allow, sponsors can add, change, or remove other sponsor.

Managing Vouchers from the Sponsorship Portal

Sponsors can manage voucher lists and sponsored guest access invitations from the sponsorship portal.

From the Sponsorship UI, select *Invite Users*. The *Create Voucher* page opens. You can create a single voucher, allow ES to generate multiple vouchers, or upload a list of vouchers from a CSV file.

FIGURE 31. Create Voucher Selection Page

Creat	e Voucher Next >
_	
۲	Create one voucher.
	Select this option to create a single voucher.
0	Generate multiple vouchers.
	Select this option to automatically generate multiple vouchers. This option does not allow user information to be specified.
0	Upload a CSV file containing a list of vouchers.
	The file must be formatted in the following sequence: vouchers, name, description, company, email, expiration date, sponsor, SMS phone number, SMS country code. If voucher is left blank, a voucher will be generated and emailed or SMSed to the user. A template file is available for <u>download</u> .

How to Create a Single Voucher

1. On the Create Vouchers page, select Create one voucher.

FIGURE 32. Sponsorship Portal - Create Voucher

reate Voucher	Sa
🖲 Name:	
Company:	
🖲 Email:	
🖲 Email Voucher To User?	
Phone Number:	United State 💌
SMS Voucher To User?	
💿 Redeem Voucher By:	20130730
• Reason:	

- 2. Enter the guest user information and Save.
 - Name Guest user name.

Note >>

If *Require Username Match* has been specified in the voucher list, the guest must authenticate with a username that matches the name specified in the voucher provided by the sponsor. This allows the voucher to be locked to a particular user.

- Company Guest user company.
- Email Guest user email address.
- Email Voucher to User? Checked by default. If checked and Email is entered, a voucher is sent to guest user by email.
- Phone Number Select country and enter guest user phone number.
- SMS Voucher to User? Checked by default. If checked and Phone Number is entered, a voucher is sent to guest user by SMS.

Note >>

Voucher notifications sent by Email or SMS are stored on the *Notifications* tab on the ES Admin UI Dashboard.

- Redeem Voucher By The date after which the voucher may no longer be redeemed.
- Reason The reason the guest user is provided access.

Note >>

When you create a single voucher, a voucher is automatically generated according to the format specified when you created the voucher list. See "Adding a Voucher Prompt to the Enrollment Workflow" on page 11.

Details are displayed on the Voucher Confirmation page.

FIGURE 33.	Voucher	Confirmation
------------	---------	--------------

oucher Confirmation		Create Another		
The sponsored user will need to been emailed to the user at test	provide the voucher below to access the networ user@testcompany.net.	k. The voucher below has		
🖲 Voucher:	apbg			
🖲 Email:	testuser@testcompany.net			
Country:	United States			
Phone Number:	3035551212			
🖲 Name:	Test User			
Company:	Test Company			
Description:				
	20130731			
Redeem Voucher By:	20100/01			

How to Generate Multiple Vouchers

You can have ES generate voucher for you. The automatically generated vouchers contain only the one-time password and expiration date, and are in the format specified in the voucher list. The generated vouchers can be downloaded as a CSV or TXT file.

- 1. On the Create Vouchers page, select Generate multiple vouchers.
- 2. Enter the number of vouchers to create.

uto-Generated Vouchers		Done
Result: Download:	10 vouchers have been auto-gene Spreadsheet Text File	erated.
Vouchers:	Voucher	Expiration Date
	xcqn	20131230
	pojy	20131230
	cviz	20131230
	cirz	20131230
	lepu	20131230
	rics	20131230
	hqlo	20131230
	dyid	20131230
	njrs	20131230
	hjsa	20131230

FIGURE 34. ES-Genera	ted Vouchers
----------------------	--------------

3. Click Done. The auto-generated vouchers are added to the voucher list.

How to Upload a List of Vouchers from a CSV file

Uploading a CSV file on the Sponsorship Portal is the same process as uploading a CSV file from the ES Admin UI.

If you are using a comma-separated value (CSV) file to upload multiple vouchers, the information must be formatted according to the instructions on the *Create Vouchers* page. A template file is available for download.

- 1. On the Create Vouchers page, select Upload a CSV file containing a list of vouchers.
- 2. Click Choose File to navigate to the CSV file to upload and click Next.

E Send Vouchers By TXT Message:					
Voucher 401	Status Available	End-User Name	Company	Sponsor anna@cloudpath.net	Expires 20131230
402	Available			anna@cloudpath.net	20131230
403	Available			anna@cloudpath.net	20131230
404	Available			anna@cloudpath.net	20131230
405	Available			anna@cloudpath.net	20131230
		🎼 🔷 Results 1	-5 of 5. 🗼 🕸	15 💌 🗑 🞇	

- **3.** Verify the vouchers to import and specify if voucher should be sent to user by email or SMS, and *Save*.
 - Send vouchers by TXT messages If checked, the voucher is sent to the user by TXT, if a phone number is specified in the CSV file.
 - Send vouchers by Email If checked, the voucher is sent to the user by email, if an email address is specified in the CSV file.

The *Voucher Lists* page shows which vouchers have been used, the expiration dates, and any guest user details that were entered when the sponsor created the voucher, or contained in the CSV file.

Note >>

The voucher field must be listed as *Show* in the voucher list to see it on the voucher table. For example, if *Days of Access* is set to *Do Not Show* on the voucher list, and your spreadsheet includes *Days of Access*, they do not appear in the voucher table. You must change the setting to *Show* in the voucher list. See Adding a Voucher Prompt to the Enrollment Workflow for more information.

Managing Guest User Devices

With the correct permissions, sponsors can manage devices that have enrolled under their own sponsorship, or enrolled under any other sponsor. See "Adding Sponsors to a Voucher List" on page 21 for more information about setting Sponsor permissions.

- 1. From the Sponsorship UI, select Sponsorship > Review Invitations.
- 2. Select the appropriate link to view outstanding, consumed, expired, and revoked voucher invitations.
- 3. To revoke a voucher, use the delete icon.
- 4. On the Revoke Certificate pop-up, list the reason for revocation and click *Revoke*. The voucher is not longer usable.

FIGURE 36. Revoke Certificate

Revoke Certificate X
▲ The certificate will be revoked. Please specify a reason for the revocation.
Reason Guest access no longer needed
Cancel Revoke

Managing Sponsors

With the correct permissions, you can manage sponsors in your Active Directory or LDAP Group. Permissions are set when sponsors are added to the voucher list using the Cloudpath Administrator user interface. See "Adding Sponsors to a Voucher List" on page 21.

1. From the Sponsorship UI, select *Administration > Sponsors*. The tables show which sponsors are able to log onto the sponsorship portal and sponsor guest users using each voucher list.

The p	oage belov	controls which	n sponsors ar	e able to log into th	e sponsorship portal and sponsor users.	
•	List 1:	Guest User Vouchers				
Individ		ual Sponsors:				
	(Add Sponsor	+	Name	Email	Туре
			JX	Test User 1	testuser@company.net	ONBOARD
			JX	Test User 2	testuser2@company.net	ONBOARD
			JX	Sample User	sampleuser@samplecompany.net	ONBOARD
			-		🏟 🌐 Results 1 - 3 of 3. 👘 📦 🛛 15 😱 🛛 💥	· ·

FIGURE 37. Sponsors per Voucher List

2. From this page, eligible sponsors can add or delete other sponsors, edit sponsor login information, or modify sponsor permissions within their AD or LDAP group.

For details on configuring an authentication server for sponsors, see "Authentication Server Configuration" on page 10.